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Pyropteron muscaeformis lusohispanica Lastuvka & Lastuvka, subsp. n. from the Iberian Peninsula  
(Lepidoptera: Sesiidae)

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## *Pyropteron muscaeformis lusohispanica Laštůvka & Laštůvka, subsp. n. from the Iberian Peninsula (Lepidoptera: Sesiidae)*

Z. Laštůvka & A. Laštůvka

### Abstract

*Pyropteron muscaeformis lusohispanica Laštůvka & Laštůvka, subsp. n.* has been described from the Iberian Peninsula. This subspecies differs especially by its black-white ground colouration and by its female genitalia morphology. It has been recorded in various parts of Spain and Portugal.

KEY WORDS: Lepidoptera, Sesiidae, *Pyropteron*, new subspecies, Iberian Peninsula.

*Pyropteron muscaeformis lusohispanica Laštůvka & Laštůvka, subsp. n. de la Península Ibérica  
(Lepidoptera: Sesiidae)*

### Resumen

Se describe una nueva subespecie de *Pyropteron muscaeformis lusohispanica Laštůvka & Laštůvka, subsp. n.*, procedente de la Península Ibérica. Se distingue especialmente por presentar una básica coloración negro-blanco y por la morfología de su genitalia femenina. Esta subespecie fue encontrada en diversas partes de España y Portugal.

PALABRAS CLAVE: Lepidoptera, Sesiidae, *Pyropteron*, nueva subespecie, Península Ibérica.

*Pyropteron muscaeformis lusohispanica Laštůvka & Laštůvka, subsp. n. aus der Iberischen Halbinsel  
(Lepidoptera: Sesiidae)*

### Zusammenfassung

*Pyropteron muscaeformis lusohispanica Laštůvka & Laštůvka, subsp. n.*, wird aus der Iberischen Halbinsel beschrieben. Die Unterart unterscheidet sich besonders durch die im ganzen schwarz-weiße Grundfarbe und durch die weibliche Genitalmorphologie. Sie wurde in verschiedenen Teilen von Spanien und Portugal gefunden.

SCHLÜSSELWÖRTE: Lepidoptera, Sesiidae, *Pyropteron*, neue Unterart, Iberische Halbinsel.

### Introduction

*Pyropteron muscaeformis* (Esper, 1783) has been recorded in many European countries (ŠPATENKA *et al.*, 1999, LAŠTŮVKA & LAŠTŮVKA, 2000, KALLIES & SOBCZYK, 2001), but it occurs mostly locally throughout its range. The species prefers coastal sand dunes, inland sands, clearings in pine woods, acid rock steppes. Occasionally, it has also been found on calcareous rocks and on mountain pastures, always together with the growths of its host plants, various *Armeria* species. Except for the western French, British and Irish specimens (cf. LAŠTŮVKA, 1989), it shows relatively limited geographic variability. The populations of this species, which have recently

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been found in various parts of the Iberian Peninsula, differ in several characters, and they are described here as a new subspecies.

***Pyropteron muscaeformis lusohispanica* Laštuvka & Laštuvka, subsp. n.**

Holotype ♂, Portugal, Serra da Estrela, 23/30-VI-2002 ex pupa (pupa 22-VI-2002 in the root of *Armeria alliacea*).

Paratypes: 13 ♂♂, 11 ♀♀ from the following localities: 1 ♂, 3 ♀♀, same data as holotype, 1 ♂, 2 ♀♀, same locality, but 23-VI-2003, 1 ♂, 1 ♀, 2004 ex pupa (pupae 22-VI-2004), 1 ♂, 2005 ex pupa (pupa 18-VI-2005), 1 ♂, 2006 ex pupa (pupa 18-VI-2006); Spain, prov. Avila, Sra Gredos, Las Vueltas, 1 ♂, 1 ♀, 18-VI-2004, 2 ♂♂, 1 ♀ and 1 ♂ ex pupa, 15-VI-2006, prov. Granada, El Molinillo, 1 ♀, 27-VI-2004, prov. Granada, Sra de Gullimona, 2 ♂♂, 1 ♀, 29/30-VI-2001, 1 ♀, 29-VI-2002, all leg. A. & Z. Laštuvka, coll. Z. Laštuvka, 1 ♂ and 1 ♀ from Las Vueltas 15-VI-2006 coll. A. Vives / Museo Nacional de Ciencias Naturales, Madrid, Spain.

Description (Figs. 1, 2): Wingspan 14–22 mm; ground colouration black-white; antenna black with a distinct white spot in both sexes; labial palpus white, partly black laterally and distally; frons brownish black, sheeny, with a broad white border before eyes; thorax with a thin yellow medial line, tegulae with a yellow border; yellow spot on the thorax laterally below forewing; forewing nearly black or greyish black, with whitish yellow or yellow spots between R5/M1/M2/M3 in apex; the external transparent area is divided in 5 cells in male and in 3–5 cells in female; the cells being shorter from R5 towards Cu1; the posterior transparent area absent or vestigial in female, distinct in male; forewing underside greyish, with yellowish spots in apex and with yellow or whitish yellow scales in basal part; the hindwing discoidal spot of the same breadth between wing margin and M1, then narrows towards M2; fore coxa white dorsally and black ventrally; second and third tibia fuscous or greyish black, distinctly white laterally and distally; abdomen dark greyish black or fuscous with narrow white borders of 2nd, 4th and 6th segment and usually with a distinct central line dorsally; underside dark, greyish black, sometimes with several whitish scales; anal tuft fuscous, with greyish or whitish hairs laterally.

Male genitalia: Without differences from the nominotypical form (cf., e.g. ŠPATENKA *et al.*, 1999, LAŠTUVKA & LAŠTUVKA, 2000).

Female genitalia (Fig. 5): Antrum more or less straight, distinctly funnel-shaped distally; ductus bursae thin, with a terminal mouth into corpus bursae.

Diagnosis: The ground coloration is usually brown-yellow in the nominotypical subspecies (Figs. 3, 4); frons, labial palpus, coxa, tibia and abdominal rings are whitish yellow or yellow; labial palpus with longer scales in male. The white spot on male antenna is indistinct or absent. The exterior transparent area is rounded usually, with the cells between R5/M1, M1/M2 and M2/M3 more or less of the same length. The hindwing discoidal spot is triangular, gradually narrowing from the wing margin towards M2. The nominotypical subspecies differs also in female genitalia (Fig. 6). Its antrum is bent and widens only slightly distally. Ductus bursae is thick distally, with a subterminal mouth into corpus bursae. The subspecies (or a local form) 'occidentalis Joannis, 1908' is similar to the nominotypical form, but is more yellow and partly different in the female genitalia morphology (cf. LAŠTUVKA, 1989).

Biology: The biology of this subspecies does not differ from the nominotypical form. The larva develops one year long in the roots of various *Armeria* species. It pupates in the second half of May and in June, adults have been collected in June and July.

Habitat and distribution: The new subspecies has been recorded in several Iberian mountains (Serra da Estrela [Portugal], Sierra de Gredos, Sierra de Gullimona and Sierra de Huétor [Spain]) in the altitudes of 1400–1900 m, usually on pastures with the occurrence of the host plant.

Comparative material: *Pyropteron muscaeformis muscaeformis*: about 50 ♂♂ and 50 ♀♀ from Spain (prov. Lérida, Coll. del. Cantó, 1 ♂, 19-VII-1993, leg. A. & Z. Laštuvka, cf. LAŠTUVKA *et al.*, 2000), France (Hautes Alpes and Massif Central), Denmark, Germany, Poland, Czech Republic, Slovakia and Italy, coll. Z. Laštuvka. *Pyropteron muscaeformis occidentalis*: France, Bretagne, St. Brieuc, 2 ♂♂, 12-VI-1985, 4 ♂♂, 1 ♀, 1985 ex larva (larvae 12-VI-1985), leg. et coll. Z. Laštuvka.



## PYROPTERON MUSCAEFORMIS LUSOHISPANICA LAŠTUVKA &amp; LAŠTUVKA, SUBSP. N. FROM THE IBERIAN PENINSULA

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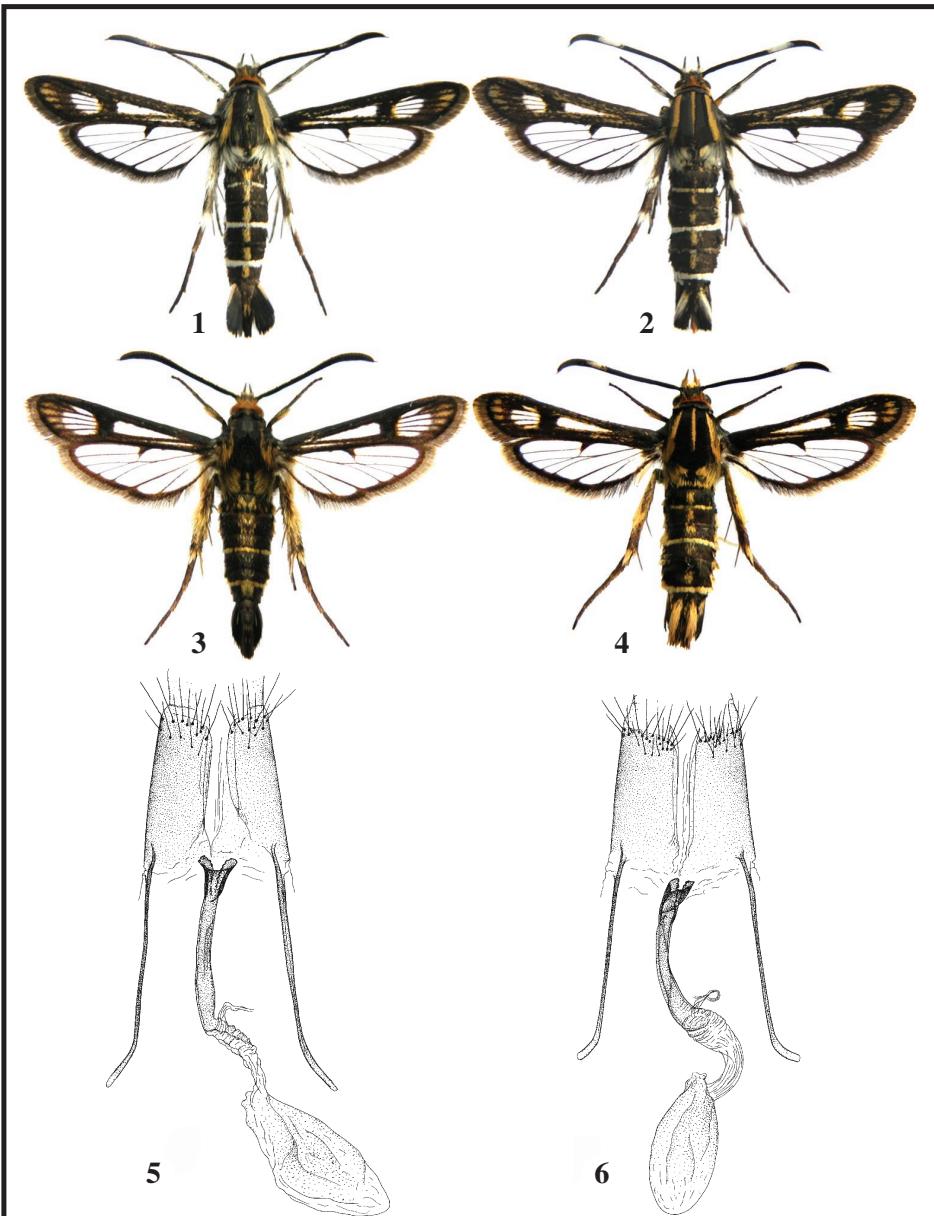
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Figs. 1-6.— Adults and female genitalia of *Pyropteron muscaeformis*, **1** *P. muscaeformis lusohispanica*, male, holotype, **2, 5** *P. muscaeformis lusohispanica*, female, Portugal, Serra da Estrela, **3** *P. muscaeformis muscaeformis*, male, Slovakia, **4, 6** *P. muscaeformis muscaeformis*, female, Slovakia.